

^{Ch. 1-V}
ARMY Declass/Release Instructions On File*

^{Declassified}
JOINT ARMY-NAVY
INTELLIGENCE STUDY
OF
BULGARIA

JANIS No. 38

VOLUME No. 1 of 3

JOINT INTELLIGENCE STUDY PUBLISHING BOARD

October · 1943

MASTER COPY - RETURN TO FILES

~~Confidential~~

JOINT ARMY-NAVY
INTELLIGENCE STUDY
OF
BULGARIA

(JANIS No. 38)



MILITARY INTELLIGENCE DIVISION G-2
OFFICE OF NAVAL INTELLIGENCE
OFFICE OF STRATEGIC SERVICES



WASHINGTON, D. C.



October · 1943

DOCUMENT NO. 001
NO CHANGE IN CLASS. ☐
☒ DECLASSIFIED
CLASS. CHANGED TO: TS S. C
NEXT REVIEW DATE: _____
AUTH: HR 70-2
DATE: 2 July 80 REVIEWER: 018995

List of Effective Pages

CHAPTER	PAGES IN EFFECT	PAGE NUMBERS
Introductory Pages	Original	i to xxi
Chapter I	Original	I - 1 to I - 4
Chapter II	Original	II - 1 to II - 30
Chapter III	Original	III - 1 to III - 84
Chapter IV	Original	IV - 1 to IV - 39
Chapter V	Original	V - 1 to V - 31
Chapter VI	Original	VI - 1 to VI - 30
Chapter VII	Original	VII - 1 to VII - 62
Chapter VIII	Original	VIII - 1 to VIII - 13
Chapter IX	Original	IX - 1 to IX - 11
Chapter X	Original	X - 1 to X - 13
Chapter XI	Original	XI - 1 to XI - 5
Chapter XII	Original	XII - 1 to XII - 4
Chapter XIII	Original	XIII - 1 to XIII - 4
Appendix I	Original	App. I - 1 to App. I - 13
Appendix II	Original	App. II - 1 to App. II - 13

iii

[illegible]

Confidential

FOREWORD

v

FOREWORD

A. STANDARD MAPS.

For strategical considerations and spellings of names two British map series were chosen as principal base maps in this study: the 4088 Series, scale 1/250,000, published in 1940, for the area south of the latitude of Sofiya; and the 4072 Series, scale 1/500,000, published in 1940, for the area north of the latitude of Sofiya. Both series were reprinted by the U. S. Army Map Service.

The third basic map series is the set of hydrographic charts, composed of two British Admiralty charts (Nos. 2230 and 2399) and one U. S. Hydrographic Office chart (No. 4196). The two British charts were reprinted in 1941 as Emergency Reproductions by the U. S. Hydrographic Office. The U. S. H. O. chart was published in 1929.

B. STANDARDIZATION OF SPELLINGS OF NAMES.

With few exceptions, the spellings of names given on the maps of these three series have been used throughout JANIS No. 38. Such exceptions are noted at the beginning of each chapter. In many cases, the spelling of a name varies on the three standard series. These variants and the standard series on which they are used, and other important variants, are listed and cross-referenced in Appendix I.

The spellings of names which do not appear on the standard maps are given in the Romanized Bulgarian form. These spellings and the most important variants are also listed and cross-referenced in Appendix I.

C. THE BULGARIAN LANGUAGE.

(1) General. The Bulgarian language is written in the Cyrillic alphabet. The characters are similar to the Russian except that И, Ъ, Ы, and В are omitted, and ъ and ѣ are added. The spoken language has two major dialects, an Eastern and a Western, and additional minor dialects which complicate the pronunciation of Bulgarian nomenclature.

The Bulgarian Cyrillic characters ъ and ѣ are omitted in transliteration at the end of the word. These two characters and ѣ are indiscriminately written within a word by the Bulgarians for several sounds, especially for a sound approaching u in *but*. Most map series transliterate ъ, ѣ and ѣ within a word as i or e, or omit them entirely. They are not taken into account in the remarks on pronunciation where i and e are explained.

The Roman characters and digraphs herein used in the transliteration of the Bulgarian alphabet and their approximate pronunciations are as follows:

a	a in <i>father</i>
dzh	j in <i>judge</i>
e	e in <i>met</i> but sometimes ye as in <i>yet</i> at the beginning of a word or syllable
g	g in <i>get</i>
kh	ch in German <i>ach</i>
i	i in <i>machine</i>
o	o in <i>or</i>
r	r distinctly rolled with the tip of the tongue
s	s in <i>set</i> , never as s in <i>rose</i>
sht	sh and t
ts	ts in <i>nets</i>
u	u in <i>rule</i>
yu	like the word <i>yew</i>
ya	like <i>yah</i>
zh	z in <i>azure</i> , but sh at the end of a word

In addition b, ch, d, f, k, l, m, n, p, sh, t, v, z are pronounced as in English. But at the end of a word, d is pronounced as t, v as f, and z as s.

(2) Nomenclature Evaluation of Maps.

(a) *G.S., G.S. 4088 Series; 1/250,000.* This series is the best of the map sources for nomenclature. The relatively large scale adds to the series' value. However, different transliteration systems were applied to different names on sheets, often without consistency; shch is sometimes used for sht, ye for e, and ii for final i. For example, Panagyurishche for Panagyurishte, Yemina for Emina, and Kharmanlii for Kharmanli.

(b) *G.S., G.S. 4072 Series; 1/500,000.* The series is a fair source for nomenclature. Coverage of the country is complete. The number of names is not large in relation to the scale. Some typographical errors are present. The same caution should be exercised for transliteration differences as on the 4088 Series; shch often appears for sht, ii for final i, and h for kh.

(c) *B.A. and U. S. H. O. Hydrographic Charts; various scales.* The original British Admiralty charts (Nos. 2230 and 2399) were published in 1854 and 1855 and revised editions were printed in 1941 as emergency reproductions by the U. S. Hydrographic Office. The U. S. Hydrographic Office chart (No. 4196) was published in 1929. On all three the nomenclature is not reliable as names are commonly in Turkish or Greek.

(d) *Karta Automobilskih, Kraljenina Jugoslavia; 1/600,000.* The map has no publication date. It covers only western Bulgaria and does not contain many names but it is a dependable source. Croatian spellings of names are used in Bulgarian and Yugoslavian territory. Transliteration variations from those used herein are: c for ts, s for sh, h for kh, z for zh, and j for y. For example, Strumica for Strumitsa, Vitosa for Vitosha, Golem Vrh for Golem Vrk, Knezeno for Knezhen, and Sofija for Sofiya.

(e) *Service Topographique des A.A.O.; 1/200,000.* The map was published about 1918. It has a large number of names and is legible. Locations of the names are very reliable but typically French spellings are used. Some transliteration variations from those used herein are: Doupnitza for Dupnitsa, Tchouka for Chuka, Ihtiman for Ikhtiman, and Djoumaya for Dzhumaya.

(f) *Institutul Geografic Militar, Bucuresti; 1/500,000.* The map was published in 1937 and covers the northern half of the country. It is detailed and is generally reliable for nomenclature. Exceptions are transliteration differences arising from Rumanian interpretation of Bulgarian names; c is sometimes used for k, c for ch, c for ts, j for y, z for zh, and s for sh. For example: Sveti Nicola for Sveti Nikola, Cerni for Cherni, Grivica for Grivitsa, Luda Jana for Luda Yana, Pazardzik for Pazardshik, and Sipka for Shipka.

(g) *Karta na Bulgariya; 1/40,000.* The map was published from 1902 to 1921 and covers all of north central Bulgaria. Names are in Cyrillic, the map is official and is the best for nomenclature that is published in Bulgaria.

D. NUMBERING SYSTEM.

All pages, tables, figures, illustrations, and plans are numbered consecutively according to the chapter wherein they are contained. For example, Table IV - 21 is the 21st table in Chapter IV and Plan VII - 2 is the second plan (oversize map) for Chapter VII.

E. CORRECTIONS, ADDITIONS AND RECOMMENDATIONS.

The Joint Intelligence Study Publishing Board will welcome suggestions and recommendations from the users of this study. Officers and others who are familiar with the area covered are invited to submit corrections and additions.

JOINT INTELLIGENCE STUDY PUBLISHING BOARD,
3806 Munitions Building,
Washington, D.C.

TABLE OF CONTENTS

vii

Table of Contents

	PAGES		PAGES
List of effective pages	ii	31. Oceanography	III - 2 to III - 15
Correction record	iii	A. Tides	III - 2
Foreword	v to vi	B. Tidal currents	III - 2
Table of Contents	vii to x	C. Non-tidal currents	III - 2
List of Figures and Plans	xi to xii	D. Sea and swell	III - 3
List of Illustrations	xiii to xv	E. General discussion of hydrographic factors	III - 7
List of Tables	xvi to xvii	F. Surface and subsurface temperatures	III - 7
Index	xviii to xxi	G. Surface and subsurface salinity	III - 10
CHAPTER I. BRIEF	I - 1 to I - 4	H. Density	III - 10
10. Physical Elements	I - 1 to I - 2	I. Bottom sediments	III - 11
A. Orientation and military geography	I - 1	J. Acoustic conditions	III - 12
B. Oceanography	I - 1	K. Transparency and color of water	III - 12
C. Coastal hydrography	I - 1	L. Biological factors	III - 13
D. Coasts	I - 2	32. Coastal Hydrography	III - 16
E. Landing places	I - 2	A. Offshore zone	III - 16
F. Meteorology and climatology	I - 2	B. Coastal currents	III - 16
11. Cultural Elements	I - 2 to I - 4	C. Underwater defenses	III - 16
A. Cities and towns	I - 2	33. Coasts	III - 17 to III - 50
B. Resources and trade	I - 3	A. Cape Kuri to Galachiya Point	III - 17
C. Communications	I - 3	B. Galachiya Point to Tsarevo	III - 18
D. Transportation	I - 3	C. Gulf of Burgaz and approaches; Tsarevo to	
E. Port facilities	I - 4	Cape Zeitin	III - 20
F. People and government	I - 4	D. Gulf of Burgaz; Cape Zeitin to Sozopol	III - 22
12. Military Elements	I - 4	E. Gulf of Burgaz; Sozopol Bay	III - 24
A. Army (except Air)	I - 4	F. Gulf of Burgaz; Kavaz Svitera to	
B. Army Air	I - 4	Nos Sveta Anastasiya	III - 26
C. Navy (except Air)	I - 4	G. Gulf of Burgaz; Nos Sveta Anastasiya to Burgaz	III - 28
D. Navy Air	I - 4	H. Gulf of Burgaz; Burgaz to Pomoriye	III - 30
CHAPTER II. MILITARY GEOGRAPHY	II - 1 to II - 30	I. Gulf of Burgaz; Pomoriye to Ravda Burnu	III - 32
20. General Description	II - 1	J. Gulf of Burgaz; Ravda Burnu to Cape Emine	III - 34
A. Regional summary	II - 1	K. Cape Emine	III - 36
21. Relief	II - 2 to II - 9	L. Cape Emine to Cape Aspro	III - 38
A. General	II - 2	M. Cape Aspro to Kamchiya River	III - 40
B. Specific	II - 2	N. Kamchiya River to Cape Galata	III - 41
22. Lakes, streams, and swamps	II - 9 to II - 10	O. Varna Bay	III - 43
A. General	II - 9	P. Varna Bay; Cape Galata to Varna	III - 45
B. Specific	II - 9	Q. Varna Bay; Varna to Cape Sveti Georgii	III - 47
23. Vegetation	II - 10 to II - 11	R. Cape Sveti Georgii to Balic	III - 50
A. General	II - 10	34. Landing Places	III - 51 to III - 84
B. Specific	II - 11	A. Introduction	III - 51
24. Seasonal Change	II - 11 to II - 12	B. Description of the coast and landing beaches	III - 51
A. General	II - 11	CHAPTER IV. CLIMATE AND METEOROLOGY	IV - 1 to IV - 39
B. Specific	II - 11	40. General Description	IV - 1 to IV - 7
25. Critical Areas	II - 12 to II - 13	41. Effect of Climate on Operations	IV - 8 to IV - 15
A. General	II - 12	A. Landing operations	IV - 8
B. Specific	II - 13	B. Movement over the country	IV - 10
26. Routes to Critical Areas	II - 13 to II - 30	C. Aviation	IV - 11
A. General	II - 13	D. Chemical warfare	IV - 12
B. Specific	II - 13	E. Sound ranging	IV - 15
CHAPTER III. OCEANOGRAPHY, COASTAL HYDROGRAPHY,		F. Type of weather	IV - 15
COASTS, LANDING PLACES	III - 1 to III - 84	G. Forecasting	IV - 15
30. General Description	III - 1 to III - 2	42. Meteorological Facilities	IV - 15
A. Tides and currents	III - 1	A. Meteorological service	IV - 15
B. Seas and swells	III - 1	B. Meteorological equipment and personnel	IV - 15
C. Fogs	III - 1	CHAPTER V. CITIES AND TOWNS	V - 1 to V - 31
D. Hydrographic factors	III - 1	50. General Description	V - 1
E. Bottom	III - 1	A. Degree of urbanization	V - 1
F. Fishing areas	III - 1	B. Functions	V - 1
G. Coastal hydrography	III - 1	C. Strategic and political importance	V - 1
H. Coasts	III - 1	D. Physical characteristics	V - 1
		E. Health and sanitation	V - 1

viii

TABLE OF CONTENTS

C

	PAGES		PAGES
51. City Descriptions, Group I	V - 3 to V - 23	B. Chemical and allied industries	VI - 16
A. Sofiya	V - 3	C. Textiles	VI - 17
B. Plovdiv	V - 7	D. Building materials	VI - 18
C. Varna	V - 11	66. Food Resources	VI - 18 to VI - 24
D. Ruse	V - 15	A. Agriculture	VI - 18
E. Burgaz	V - 18	B. Fish	VI - 24
F. Pernik	V - 20	67. Water Supply	VI - 24 to VI - 30
G. Vidin	V - 22	A. General characteristics	VI - 24
52. City Descriptions, Group II	V - 23 to V - 29	B. Springs and wells	VI - 26
A. Pleven	V - 23	C. Water quality	VI - 26
B. Sliven	V - 23	D. Governmental activity	VI - 26
C. Stara-Zagora	V - 24	E. Supply system by district	VI - 26
D. Shumen	V - 25	F. City and town water supply	VI - 27
E. Kyustendil	V - 25		
F. Kazanlk	V - 26	CHAPTER VII. COMMUNICATIONS AND	
G. Lom	V - 27	TRANSPORTATION	VII - 1 to VII - 62
H. Trnovo	V - 27	70. General Description	VII - 1
I. Gabrovo	V - 29	A. Communication	VII - 1
53. City Descriptions, Group III	V - 29 to V - 31	B. Transportation	VII - 1
A. Khaskovo	V - 29	71. Radio and Special Wireless Services	VII - 1 to VII - 4
B. Yambol	V - 30	A. The radio system	VII - 2
C. Pazardzhik	V - 30	B. Point-to-point communication	VII - 2
D. Asenovgrad	V - 30	C. Communication with aircraft	VII - 2
E. Vratsa	V - 30	D. Communication with ships	VII - 4
F. Dupnitsa	V - 30	E. List of stations	VII - 4
G. Razgrad	V - 30	72. Telegraph	VII - 4 to VII - 5
H. Svishtov	V - 30	A. Pattern of the network	VII - 4
I. Chirpan	V - 31	B. Ownership and operation	VII - 4
J. Samokov	V - 31	C. Stations	VII - 5
K. Panagyurishte	V - 31	D. Route equipment	VII - 5
L. Petrich	V - 31	E. Vulnerable features	VII - 5
M. Gorna Dzhumaya	V - 31	73. Telephones	VII - 5 to VII - 6
N. Gorna-Orekhovitsa	V - 31	A. Pattern of the network	VII - 5
CHAPTER VI. RESOURCES AND TRADE	VI - 1 to VI - 30	B. Centrals	VII - 5
60. General Description	VI - 1 to VI - 2	C. Route equipment	VII - 6
A. Commerce	VI - 1	D. Vulnerable features	VII - 6
B. Finance	VI - 1	74. Submarine cable	VII - 6
C. Industrial raw materials and primary processing	VI - 1	75. Postal service	VII - 6
D. Electric power	VI - 1	A. Extent of development of service	VII - 6
E. Manufacturing	VI - 1	B. Type of service offered	VII - 6
F. Food resources	VI - 1	C. Reliability of system	VII - 6
G. Water supply	VI - 2	76. Railroads	VII - 6 to VII - 40
61. Commerce	VI - 2	A. Pattern of the system	VII - 6
A. Export tonnage	VI - 2	B. Administration	VII - 7
B. Import tonnage	VI - 2	C. Track and right-of-way	VII - 8
62. Finance	VI - 3 to VI - 4	D. Equipment	VII - 16
A. Currency	VI - 3	E. Shops, terminals and yards	VII - 18
B. Purchasing power	VI - 3	F. Traffic	VII - 18
C. Currency value in gold	VI - 3	G. Capacity	VII - 20
D. The banking system	VI - 4	H. Vulnerable points	VII - 21
63. Industrial Raw Materials and Primary Processing	VI - 4 to VI - 9	I. Lines under construction	VII - 21
A. Minerals	VI - 4	J. Projected lines	VII - 21
B. Fuel	VI - 6	77. Roads	VII - 40 to VII - 60
C. Quarries	VI - 8	A. General characteristics	VII - 40
64. Electric Power	VI - 9 to VI - 15	B. Natural conditions along roads	VII - 40
A. Extent of electrification	VI - 9	C. Administration	VII - 46
B. Transmission network	VI - 9	D. Standards of construction and quality	VII - 46
C. Self-sufficiency in power supply	VI - 9	E. Maintenance	VII - 48
D. Consumption	VI - 9	F. Traffic density and use of roads	VII - 48
E. Diesel plants	VI - 10	G. Vehicles	VII - 48
F. Steam plants	VI - 10	H. Description of main roads	VII - 49
G. Hydroelectric plants	VI - 11	78. Inland Water Transport	VII - 60 to VII - 61
65. Manufacturing	VI - 15 to VI - 18	A. The Danube River	VII - 60
A. Metals and machines	VI - 15	B. Canals	VII - 61

TABLE OF CONTENTS

ix

	PAGES		PAGES
79. Merchant Shipping	VII - 61 to VII - 62	C. Education	IX - 7
A. Available tonnage	VII - 61	D. Labor	IX - 7
B. Immobilized tonnage	VII - 61	95. Government Organization	IX - 8
CHAPTER VIII. PORT FACILITIES	VIII - 1 to VIII - 13	A. Locus of authority	IX - 8
80. General Description	VIII - 1 to VIII - 2	B. Local government	IX - 8
A. Distinctive regional characteristics	VIII - 1	C. Efficiency	IX - 8
B. Major ports	VIII - 1	96. Security and Public Order	IX - 8 to IX - 9
C. Minor ports	VIII - 1	A. Police	IX - 8
81. Major Ports—Burgaz	VIII - 2 to VIII - 5	B. Other officials with policing power	IX - 9
A. Harbor	VIII - 2	C. Penal institutions	IX - 9
B. Landing facilities	VIII - 3	D. Pertinent legal peculiarities	IX - 9
C. Availability of supplies	VIII - 5	97. Political Factors	IX - 9 to IX - 11
D. Repair facilities	VIII - 5	A. Political organizations	IX - 9
E. Vulnerability	VIII - 5	B. Current trends in foreign policy	IX - 10
F. Recent changes	VIII - 5	CHAPTER X. ARMY (EXCEPT AIR)	X - 1 to X - 13
81. Major Ports (Concluded)—Varna	VIII - 5 to VIII - 12	100. General Description	X - 1
A. Harbor	VIII - 5	A. History and traditions	X - 1
B. Landing facilities	VIII - 8	B. Foreign influences	X - 1
C. Supplies	VIII - 11	101. Strength Statistics	X - 2
D. Repair facilities	VIII - 12	A. Active army	X - 2
E. Vulnerability	VIII - 12	B. Trained reserve	X - 2
F. Recent changes	VIII - 12	C. Untrained reserve	X - 2
82. Minor Ports—Tsarevo (Vassiliko)	VIII - 12 to VIII - 13	D. Police	X - 2
A. Harbor	VIII - 12	102. Organization	X - 2 to X - 6
B. Landing facilities	VIII - 12	A. Command and staff	X - 2
C. Capacity	VIII - 12	B. Organization of subordinate units	X - 4
D. Supplies and repairs	VIII - 12	103. Personnel Characteristics	X - 7
E. Vulnerability	VIII - 13	A. General	X - 7
F. Local problems	VIII - 13	B. Officers	X - 7
82. Minor Ports (Continued)—Akhtopol	VIII - 13	C. Enlisted men	X - 7
A. Harbor	VIII - 13	104. Finance	X - 7
B. Landing facilities	VIII - 13	A. Exchange	X - 7
C. Capacity	VIII - 13	B. Rate of pay	X - 7
D. Supplies and repairs	VIII - 13	C. Military budget	X - 7
E. Vulnerability	VIII - 13	105. Supply and Equipment	X - 7 to X - 8
F. Local problems	VIII - 13	A. Infantry	X - 7
82. Minor Ports (Concluded)—Nesebr	VIII - 13	B. Cavalry	X - 8
A. Harbor	VIII - 13	C. Artillery	X - 8
B. Landing facilities	VIII - 13	D. Armored tanks	X - 8
C. Capacity	VIII - 13	E. Transportation	X - 8
D. Supplies and repairs	VIII - 13	F. Ammunition	X - 8
E. Vulnerability	VIII - 13	G. Other equipment	X - 8
F. Local problems	VIII - 13	106. Mobilization System	X - 8 to X - 10
CHAPTER IX. PEOPLE AND GOVERNMENT	IX - 1 to IX - 11	A. Territorial structure	X - 8
(Including Health and Sanitation)		B. Draft and training of personnel	X - 9
90. General Description	IX - 1 to IX - 3	C. Mobilization	X - 10
A. History	IX - 1	107. Strategic and Tactical Doctrines	X - 10
B. Contemporary social aspects	IX - 2	108. Training, Morale and Efficiency	X - 11
C. The government	IX - 2	109. Fortifications	X - 11 to X - 13
91. Population—Physical Characteristics	IX - 3	A. Akhtopol	X - 11
A. Distribution	IX - 3	B. Balcic	X - 11
B. Ethnic groups	IX - 3	C. Burgaz and the Gulf of Burgaz	X - 11
92. Population—Cultural Characteristics	IX - 3 to IX - 4	D. Cavarva	X - 11
A. Language	IX - 3	E. Chimovo	X - 11
B. Religion	IX - 4	F. Emine	X - 11
C. Temperament and attitudes	IX - 4	G. Funduklee	X - 11
93. Health and Sanitation	IX - 5 to IX - 6	H. Galata	X - 11
A. Public health	IX - 5	I. Ingenieur Sarafovo	X - 12
B. Diseases	IX - 5	J. Kamchiya River	X - 12
C. Precautionary recommendations	IX - 5	K. Nesebr	X - 12
94. Social Structure and Social Conditions	IX - 6 to IX - 8	L. Pomoriye	X - 12
A. Social groups	IX - 6	M. Sozopol	X - 12
B. Stability	IX - 7	N. Varna	X - 12
		O. Tsarevo	X - 13
		P. General	X - 13

x

TABLE OF CONTENTS

Confidential

	PAGES		PAGES
CHAPTER XI. ARMY AIR	XI - 1 to XI - 5	B. Naval districts	XII - 1
110. General Description	XI - 1	122. Fleet	XII - 1 to XII - 2
A. History and traditions	XI - 1	A. Strength	XII - 1
B. Brief description of the establishment and its efficiency as a whole	XI - 1	B. State of units	XII - 1
111. Strength	XI - 1	C. New construction	XII - 2
A. Aircraft	XI - 1	D. Fleet organization	XII - 2
B. Personnel	XI - 1	123. Personnel	XII - 2
112. Organization	XI - 1 to XI - 2	A. Numbers	XII - 2
A. Central administration	XI - 1	B. Efficiency and morale	XII - 2
B. Tactical organization	XI - 2	C. Training	XII - 2
113. Personnel Characteristics, Officers and Enlisted Men	XI - 2	124. Base Facilities	XII - 3 to XII - 4
114. Finance	XI - 2	A. Naval dockyards and bases	XII - 3
A. Rates of pay, all grades	XI - 2	B. Commercial dockyards and bases	XII - 3
B. Air budget	XI - 2	C. Fuel storage	XII - 3
115. Supply and Equipment	XI - 3	D. Supplies	XII - 4
A. Production	XI - 3	125. Protective Measures	XII - 4
B. Imports and exports	XI - 3	A. Mine fields	XII - 4
C. Aircraft	XI - 3	B. Coast defense	XII - 4
116. Training, Morale and Efficiency	XI - 3	CHAPTER XIII. NAVY AIR	XIII - 1 to XIII - 4
A. Recruiting	XI - 3	130. General Description	XIII - 1
B. Training	XI - 3	131. Seaplane Bases	XIII - 1
117. Strategic and Tactical Doctrines	XI - 3	A. Varna Naval Dockyard (seaplane alighting area)	XIII - 1
118. Air Bases	XI - 3	B. Peindrdjik (seaplane station)	XIII - 3
119. Defense Zones	XI - 3 to XI - 5	C. Gulf of Burgaz	XIII - 3
CHAPTER XII. NAVY (EXCEPT AIR)	XII - 1 to XII - 4	APPENDIX I. GEOGRAPHICAL GLOSSARY OF BULGARIA	App. I - 1 to App. I - 13
120. General Description	XII - 1	APPENDIX II. MEDICAL AND SANITARY DATA ON BULGARIA	App. II - 1 to App. II - 13
121. Organization	XII - 1	PLANS POUCH	Volume 3
A. Ministry of Marine	XII - 1		

Unidentified

LIST OF FIGURES AND PLANS

xi

List of Figures and Plans

FIGURES

No.	TITLE	PAGES	No.	TITLE	PAGES
I - 1	Location Map of Bulgaria	Faces I - 2	III - 26	Burgaz	Faces III - 60
II - 1	Terrain Regions	Faces II - 1	III - 27	Port Plan of Burgaz Showing Approach to Poros Bay Beach	III - 61
II - 2	Index to Illustrations	Faces II - 2	III - 28	Pomoriye	Faces III - 62
II - 3	Principal Streams	Faces II - 10	III - 29	Nesebr	Faces III - 64
II - 4	Vegetation Regions	Faces II - 10	III - 30	Cape Emineh	Faces III - 66
II - 5	Orientation Map for Route Studies	II - 14	III - 31	Bela	Faces III - 68
II - 6	Struma Valley Approach to Sofia	II - 15	III - 32	Reka Galem Kamchiya	Faces III - 69
II - 7	Mesta Valley Approach to Sofia	II - 16	III - 33	Varna	Faces III - 70
II - 8	Maritsa-Iskr Valley—Plovdiv to Sofia	II - 17	III - 34	Plan of the City of Varna	III - 72
II - 9	Stara Zagora to Sofia via Karlovo and Zlatitsa	II - 18	III - 35	Balcic	Faces III - 78
II - 10	Trnovo to Sofia via Lovech and Botevgrad	II - 19	III - 36	Balcic Bay	III - 79
II - 11	Lom to Sofia via Berkovitsa	II - 20	III - 37	Cavarna	Faces III - 80
II - 11	Pirot to Sofia via Dragoman Pass	II - 20	III - 38	Cape Caliacra	Faces III - 82
II - 11	Gyueshevo to Sofia via Kyustendil	II - 20	III - 39	Karapcha	Faces III - 84
II - 12	Xanthi—Plovdiv Route	II - 21	IV - 1	Winter Wind Roses	IV - 2
II - 13	Edirne to Plovdiv	II - 22	IV - 2	Winter Isotherms	IV - 3
II - 14	Komotini to Stara Zagora	II - 23	IV - 3	December Rainfall	IV - 3
II - 15	Edirne to Stara Zagora via Topolovgrad	II - 24	IV - 4	January Rainfall	IV - 3
II - 16	Burgaz to Stara Zagora via Elkhovo	II - 25	IV - 5	February Rainfall	IV - 3
II - 16	Burgaz to Stara Zagora via Sliven	II - 25	IV - 6	Number of Days with Snow Covering Ground in January	IV - 3
II - 17	Lovech to Kazanlk and Stara Zagora	II - 26	IV - 7	Number of Days with Snowfall in Winter	IV - 3
II - 17	Trnovo to Kazanlk and Stara Zagora	II - 26	IV - 8	Winter Cloudiness	IV - 4
II - 18	Nikopol to Plovdiv via Lovech and Karlovo	II - 27	IV - 9	Days with Fog in Winter	IV - 4
II - 19	Burgaz to Varna	II - 28	IV - 10	Spring Wind Roses	IV - 4
II - 19	Limanköy to Burgaz	II - 28	IV - 11	Spring Isotherms	IV - 5
II - 20	Varna to Ruse	II - 29	IV - 12	March Rainfall	IV - 5
II - 20	Bazargic (Dobrich) to Varna	II - 29	IV - 13	April Rainfall	IV - 5
II - 21	Varna to Ruse via Shumen and Trnovo	II - 30	IV - 14	May Rainfall	IV - 5
III - 1	Location of Places Mentioned in Topic No. 31	III - 2	IV - 15	Number of Days with Snowfall in Spring	IV - 5
III - 2	General Non-tidal Currents in the Black Sea	III - 3	IV - 16	Spring Cloudiness (Tenths)	IV - 6
III - 3	Wind Roses for the Black Sea Area West of 30° East Longitude	III - 4	IV - 17	Number of Days with Fog in Spring	IV - 6
III - 4	Beaufort Wind Forces	III - 5	IV - 18	Summer Wind Roses	IV - 6
III - 5	Percentage Frequency of Wave Heights in the Western Black Sea	III - 5	IV - 19	Summer Isotherms	IV - 7
III - 6	The Percentage of Various States of Sea along the Bulgarian Coast	III - 6	IV - 20	June Rainfall	IV - 7
III - 7	Monthly Sea Surface Temperature	III - 7	IV - 21	July Rainfall	IV - 7
III - 8	Variation with Depth of Mean Temperatures in the Open Sea	III - 8	IV - 22	August Rainfall	IV - 7
III - 9	Surface Salinity	III - 9	IV - 23	Summer Cloudiness (Tenths)	IV - 8
III - 10	Maximum, Minimum, and Mean Salinity at the Surface of Varna Bay	III - 10	IV - 24	Number of Days with Fog in Summer	IV - 8
III - 11	Variation with Depth of the Mean Salinity of the Western Black Sea	III - 10	IV - 25	Autumn Wind Roses	IV - 8
III - 12	Variation of Density with Depth by Seasons	III - 11	IV - 26	Autumn Isotherms	IV - 9
III - 13	Buoyant Effect of Water of Different Density upon a Submerged Submarine of 2,400 tons Displacement	III - 11	IV - 27	September Rainfall	IV - 9
III - 14	Gulf of Varna, Bottom Sediments	Faces III - 12	IV - 28	October Rainfall	IV - 9
III - 15	The Black Sea, Gulf of Burgaz, Character of Sea Bottom	Faces III - 13	IV - 29	November Rainfall	IV - 9
III - 16	Nesebr to Emine, Character of Sea Bottom	III - 13	IV - 30	Number of Days with Snowfall in Autumn	IV - 9
III - 17	Seasonal Variation in Acoustic Conditions Black Sea, Cape Kuri to Balcic	III - 14	IV - 31	Autumn Cloudiness (Tenths)	IV - 10
III - 18	Black Sea, Cape Kuri to Balcic	Faces III - 17	IV - 32	Number of Days with Fog in Autumn	IV - 10
III - 19	Landing Place Terminology	III - 51	IV - 33	Selected Stations, Rainfall Regimes	IV - 16 to IV - 24
III - 20	Direction of Prevailing Offshore Currents	III - 51	IV - 34	Winter, Non-Persistent and FS Agents and Overhead Smoke	IV - 25
III - 21	Master Map of Landing Places	III - 52	IV - 35	Winter, Screening Smokes	IV - 25
III - 22	Index Map of Coastal Physiography	III - 53	IV - 36	Winter, Persistent Agents	IV - 25
III - 23	Akhtopol	Faces III - 54	IV - 37	Spring, Non-Persistent and FS Agents and Overhead Smoke	IV - 25
III - 24	Tsarevo	Faces III - 55	IV - 38	Spring, Screening Smokes	IV - 25
III - 25	Sozopol	Faces III - 56	IV - 39	Spring, Persistent Agents	IV - 25
			IV - 40	Summer, Non-Persistent and FS Agents and Overhead Smoke	IV - 26
			IV - 41	Summer, Screening Smokes	IV - 26
			IV - 42	Summer, Persistent Agents	IV - 26

LIST OF FIGURES AND PLANS

~~Confidential~~

No.	TITLE	PAGES	No.	TITLE	PAGES
IV - 43	Autumn, Non-Persistent and FS Agents and Overhead Smoke	IV - 26	VIII - 1	Ports on the Bulgarian Coast	VIII - 1
IV - 44	Autumn, Screening Smokes	IV - 26	VIII - 2	Vicinity Map, Burgaz	VIII - 2
IV - 45	Autumn, Persistent Agents	IV - 26	VIII - 3	Port Facilities at Burgaz	Faces VIII - 4
V - 1	Town Plan of Sofiya	Faces V - 4	VIII - 4	Vicinity Map, Varna	VIII - 7
V - 2	Town Plan of Plovdiv	Faces V - 8	VIII - 5	Port Facilities at Varna	Faces VIII - 10
V - 3	Town Plan of Varna	Faces V - 12	IX - 1	Administrative Divisions	Faces IX - 8
V - 4	Ruse	V - 16	IX - 2	National and Local Government in Bulgaria	Faces IX - 8
V - 5	Town Plan of Burgaz	Faces V - 18	X - 1	Strategic Map of Coastal and Interior Defenses	Faces X - 12
V - 6	Pernik	V - 21	XI - 1	Airfields and Seaplane Bases	Follows XI - 5
VI - 1	Resources and Industrial Resources	Faces VI - 4	XIII - 1	Varna Bay	Faces XIII - 1
VI - 2	Electric Power	Faces VI - 10	XIII - 2	Peindrdjik Seaplane Station	XIII - 2
VI - 3	Agricultural and Fisheries Resources	Faces VI - 18	XIII - 3	Gulf of Burgaz, Potential Seaplane Alighting Area	Faces XIII - 4
VI - 4	Food Processing Plants	Faces VI - 22	App. II - 1	Principal Malarious Areas	Appendix II - 9
VI - 5	Urban Water Supply, 1930	Faces VI - 24			
VI - 6	Sofiya Aqueduct	Faces VI - 26			
VI - 7	Burgaz Water Supply	VI - 28			
VII - 1	Telecommunications	Faces VII - 4			
VII - 2	Selected Railroad Bridges and Tunnels	Faces VII - 16			
VII - 3	Pernik	VII - 19			
VII - 4	Capacities of Selected Railroads	Faces VII - 20			

PLANS

III - 1	Bulgarian Coast: Reference Diagram of Landing Places	Volume III
VII - 1	Railroads and Railroad Facilities	Volume III
VII - 2	Roads	Volume III

LIST OF ILLUSTRATIONS

xiii

List of Illustrations

No.	TITLE	PAGES	No.	TITLE	PAGES
II - 1	Southwestern Mountains. Struma River Defile	II - 2	III - 30	Cape Emine. Bearing 226° true, distant 10½ miles	III - 36
II - 2	Struma-Strumitsa Basin	II - 3	III - 31	Cape Emine. Bearing 180° true, distant 2 miles	III - 36
II - 3	Struma-Strumitsa Basin. Drawing	II - 3	III - 32	Cape Emine. Bearing 183° true, distant 1 mile	III - 36
II - 4	Upper Struma Basins. Gorge near Radomir	II - 3	III - 33	From Cape Emine to Kara Burnu	III - 36
II - 5	Rila Planina. From Samokov Basin	II - 4	III - 34	Cape Emine. Bearing 0° true, distant 2½ miles	III - 37
II - 6	Pirin Planina. Northwestern Foothills	II - 4	III - 35	Cape Emine. Bearing 340° true, distant 1½ miles	III - 37
II - 7	Pirin Planina. Mountain peaks	II - 4	III - 36	Cape Emine. Bearing 276° true, distant 1.8 miles	III - 37
II - 8	Central Rhodope. Elli Dere Canyon	II - 4	III - 37	Cape Emine. Bearing 270° true, distant 2 miles	III - 37
II - 9	Central Rhodope. Elli Dere Valley	II - 5	III - 38	Cape Emine. Bearing 270° true, distant 1,000 yards	III - 37
II - 10	Central Rhodope. Dobrinishta	II - 5	III - 39	From Cape Emine to Kara Burnu	III - 38
II - 11	Central Rhodope. Mountains near Backovo	II - 5	III - 40	Kotsan Pt. Bearing 247° true, distant 8 miles	III - 39
II - 12	Eastern Rhodope	II - 5	III - 41	Keoscheh. Looking westerly	III - 39
II - 13	Sofiya Basin. Iskr River Flats	II - 5	III - 42	Cape Aspro. Looking west-northwesterly	III - 39
II - 14	Sub-Balkan Basins. Pirdop Basin	II - 6	III - 43	Kara Burnu. Looking northwesterly	III - 39
II - 15	Sub-Balkan Basins. Kazanlk Basin	II - 6	III - 44	Kara Burnu. Bearing 325° true, distant 1.3 miles	III - 39
II - 16	Plovdiv Basin	II - 6	III - 45	Mouth of the Kamchiya River. Looking south-southwesterly	III - 40
II - 17	Burgaz Basin. Coast at Nesebr	II - 7	III - 46	Ilanjik Point. Bearing 215° true, distant 1 mile	III - 40
II - 18	Balkan Mountains	II - 7	III - 47	Cape Galata. Bearing 315° true, distant 1 mile	III - 40
II - 19	Balkan Mountains. Iskr Gorge	II - 7	III - 48	Cape Galata. Bearing 270° true, distant 400 yards	III - 41
II - 20	Balkan Mountains. Iskr Defile	II - 7	III - 49	Cape Galata. Bearing 180° true, distant 1,000 yards	III - 41
II - 21	Balkan Mountains. Southern Foothills	II - 8	III - 50	Varna Bay. Looking northwesterly	III - 42
II - 22	Balkan Foothills. Near Gorna Orekhovitsa	II - 8	III - 51	From Cape Galata to Balic Valley	III - 42
II - 23	Northern Plateau. Near Belogradchik	II - 8	III - 52	Varna Bay. Looking westerly	III - 42
II - 24	Northern Plateau. Bulgarian bank of the Danube	II - 8	III - 53	Entrance to Varna Harbor. Looking westerly	III - 43
II - 25	Northern Plateau. Basaltic Hill	II - 9	III - 54	Varna. Entrance to Varna Harbor, looking northeasterly	III - 43
II - 26	Danubian Tablelands. Near Preslav	II - 9	III - 55	Varna Harbor. Looking northwesterly	III - 44
III - 1	From Cape Kuri to Stefano	III - 17	III - 56	Varna. Looking east-northeasterly from park above bathing beach	III - 44
III - 2	From Cape Kuri to Stefano	III - 17	III - 57	Varna. Looking east-northeasterly from bathing beach along north shore of Varna bay	III - 45
III - 3	From Akhtopol to Tsarevo	III - 19	III - 58	North shore of Varna Bay. Looking west-southwesterly	III - 46
III - 4	Akhtopol and Mt. Paphia	III - 19	III - 59	Evksinograd Bay. Looking easterly	III - 46
III - 5	Mt. Paphia to Cape Zeitin	III - 21	III - 60	Entrance to Evksinograd Harbor. Looking easterly	III - 47
III - 6	Mt. Paphia to Sozopol	III - 21	III - 61	Evksinograd Bay	III - 47
III - 7	Burgaz Gulf	III - 21	III - 62	Cape Sveti Dimitri and Evksinograd. Looking northerly	III - 48
III - 8	From Cape Zeitin to Sozopol	III - 23	III - 63	Cape Sveti Dimitri and Evksinograd. Looking northerly	III - 48
III - 9	Sozopol. Looking northerly across Kalpithes Bay	III - 23	III - 64	Evksinograd. Bearing 320° true, distant 1,000 yards	III - 49
III - 10	Sozopol and Environs	III - 23	III - 65	Evksinograd	III - 49
III - 11	Sozopol. Bearing 240° true, distant 600 yards	III - 25	III - 66	Cape Sveti Dimitri and Evksinograd. Looking west-southwesterly	III - 49
III - 12	Sozopol. Bearing 180° true, distant 400 yards	III - 25			
III - 13	Sozopol and Sv. Ivan Island	III - 25			
III - 14	Sozopol	III - 25			
III - 15	Nos Ativolos	III - 27			
III - 16	Nos Atiya	III - 27			
III - 17	Sveta Anastasiya I. and Muris Dagb (1)	III - 27			
III - 18	Sveta Anastasiya I.	III - 27			
III - 19	Gulf of Burgaz	III - 29			
III - 20	Burgaz Bay	III - 29			
III - 21	Burgaz. Entrance to the harbor	III - 29			
III - 22	North Shore of the Gulf of Burgaz	III - 31			
III - 23	Pomoriye (Ankhelu). Bearing 0° true, distant 800 yards	III - 31			
III - 24	Pomoriye (Ankhelu). Bearing 270° true, distant 1200 yards	III - 33			
III - 25	North Shore of the Gulf of Burgaz	III - 33			
III - 26	From Chimovo to Cape Emine	III - 33			
III - 27	Nesebr. Bearing 0° true, distant 1 mile	III - 34			
III - 28	Nesebr. Looking westerly over peninsula and isthmus	III - 35			
III - 29	From Nesebr to Kara Burnu	III - 35			

No.	TITLE	PAGES	No.	TITLE	PAGES
III - 67	Sveti Konstantin	III - 50	V - 7	Plovdiv. Knaz Aleksandr Street	V - 9
III - 68	Sozopol. Looking northerly at beach on eastern side of the isthmus	III - 58	V - 8	Varna. Looking south on Preslavska Street	V - 12
III - 69	Burgaz. The bathing beach	III - 63	V - 9	Varna. Looking north from Commercial Harbor	V - 12
III - 70	Burgaz. Waves breaking in a single line on beach north of harbor	III - 63	V - 10	Ruse. Main Square looking north	V - 15
III - 71	Nesebr. Looking west over village on peninsula	III - 65	V - 11	Ruse. Looking south towards terminal of Danubian Steamship Navigation Company	V - 17
III - 72	Nesebr. Close view. Looking east, of the sandy isthmus	III - 66	V - 12	Pernik. General view (about 1941)	V - 20
III - 73	Varna. Looking southwest at the Quarantine Station and beach south of the harbor	III - 69	V - 13	Trnovo. Aerial view of city looking south	V - 28
III - 74	Varna. Looking south at the bathing beach	III - 70	V - 14	Trnovo. Looking west toward the "Amphitheatre" on west bank of the Yantra	V - 28
III - 75	Varna. Looking north at the bathing beach	III - 71	VI - 1	Eliseina Flotation Plant and Smelter	VI - 5
III - 76	Varna. Looking south over the bathing beach	III - 71	VI - 2	Pernik Steam Plant	VI - 10
III - 77	Varna. Surf near the main bathhouse	III - 72	VI - 3	Krichim Hydroelectric Plant. Cylinder Dam	VI - 11
III - 78	Varna. Surf on the beach south of pier indicated in Illust. III - 76	III - 73	VI - 4	Krichim Hydroelectric Plant. General view downstream	VI - 12
III - 79	Varna. Looking northeastward at the wide surf belt on the north end of the beach	III - 74	VI - 5	Krichim Hydroelectric Plant. Plant under construction	VI - 12
III - 80	Varna. Looking southeast across the bay of Varna from the cliff behind the bathing beach	III - 74	VI - 6	Diagram of the Krichim Hydroelectric Plant	VI - 12
III - 81	Varna. Looking northeast across the Bay of Varna from the cliff behind the bathing beach	III - 75	VI - 7	Karlovo Hydroelectric Plant	VI - 13
III - 82	Varna. Looking south from the cliffs northeast of Varna	III - 75	VI - 8	Pancherevo Hydroelectric Plant	VI - 14
III - 83	Evksinograd. Looking east at the beach and harbor breakwater	III - 76	VI - 9	Diagram of the Rila and Pastra Hydroelectric Plants	VI - 14
III - 84	Evksinograd. The lighthouse on the end of the harbor breakwater	III - 76	VI - 10	Metal Shops of the Balkan Company	VI - 16
III - 85	Sveti Konstantin	III - 77	VI - 11	Landscape near Plovdiv	VI - 19
III - 86	Balcic. Looking eastward over the Royal Palace toward the town	III - 78	VI - 12	Farms in the Sofiya Basin (Air View)	VI - 19
III - 87	Balcic. Looking west over the town and environs	III - 79	VI - 13	Mountain Farm near Vrattsa	VI - 21
III - 88	Balcic. Looking east from behind the town	III - 80	VI - 14	Typical Rural Wells	VI - 25
III - 89	Balcic. Small pocket beach slightly east of the town	III - 80	VI - 15	Sofiya Aqueduct	VI - 29
III - 90	Balcic. Looking southwestward over the town and bay	III - 81	VI - 16	Sofiya Aqueduct. Section over the Gegula River	VI - 29
III - 91	Cavarna. Seaward bordered shore of Tiny Pocket Beach east of town	III - 82	VI - 17	Burgaz Water Supply. Thermal Spring	VI - 29
III - 92	Cavarna. Long view from the east of the piers and beach before the town	III - 82	VI - 18	Burgaz Water Supply Low Level Reservoir	VI - 30
III - 93	Cavarna. Looking southwest over the town	III - 82	VII - 1	Bulgarian State Railways. Clearance Standard	VII - 7
III - 94	Cavarna. Looking east on the shore west of town	III - 82	VII - 2	Cherepich Bridge (Bridge 20, Line 2)	VII - 10
III - 95	Cavarna. Looking southeast over the Bay, town and valley	III - 82	VII - 3	Cherepich Bridge (Bridge 20, Line 2)	VII - 11
III - 96	Bol-Ata Dere	III - 83	VII - 4	Iskr River Bridge (Bridge 29, Line 5)	VII - 11
III - 97	Syurtyu-K'oy	III - 83	VII - 5	Stone Arch Bridge at Makotsevo (Bridge 29 (a), Line 5)	VII - 12
III - 98	Syurtyu-K'oy. Looking northeast over Heraklea Yezero	III - 83	VII - 6	Bridge over Arda River (Bridge 33, Line 15)	VII - 12
V - 1	Sofiya. Aerial view of central part looking north	V - 2	VII - 7	Syuyutliika River Bridge (Bridge 34, Line 15)	VII - 13
V - 2	Sofiya. Aerial view of central part looking north	V - 2	VII - 8	Steel Bridge over Maritsa River (Bridge 35, Line 16)	VII - 13
V - 3	Sofiya. Tsar Osvoboditel Monument left foreground	V - 3	VII - 9	Yantra Bridge near Bela (Bridge 36, Line 17)	VII - 14
V - 4	Sofiya. Maria Louisa Boulevard	V - 4	VII - 10	Railroad Bridge at Trnovo (Bridge 37, Line 17)	VII - 14
V - 5	Plovdiv. Looking northwest across Maritsa River	V - 8	VII - 11	North Railroad Bridge at Trnovo (Bridge 37, Line 17)	VII - 15
V - 6	Plovdiv. Looking west from Sakhat Hill	V - 9	VII - 12	South Railway Bridge at Trnovo (Bridge 38, Line 17)	VII - 15
			VII - 13	Tunnel near Krustets (Tunnel 11, Line 17)	VII - 17
			VII - 14	Profile Sofiya-Saranovo Section on Caribrod/Svilengrad Line	VII - 22
			VII - 15	Pernik	VII - 22
			VII - 16(a)	Bulgarian National Railways 2-12-4 Standard-Gauge Tank Locomotive	VII - 23
			VII - 16(b)	Dimensioned Drawing of 2-12-4 Standard-Gauge Tank Locomotive	VII - 23
			VII - 17	Dimensioned Drawing of 0-10-0 Standard-Gauge Locomotive	VII - 23
			VII - 18(a)	2-4+4-0 Standard-Gauge Locomotive	VII - 24
			VII - 18(b)	Dimensioned Drawing of 2-4+4-0 Standard-Gauge Locomotive	VII - 24
			VII - 19	Dimensioned Drawing of 2-10-0 Standard-Gauge Locomotive	VII - 25
			VII - 20	Dimensioned Drawing of 2-6-2 Standard-Gauge Tank Locomotive	VII - 25
			VII - 21	Dimensioned Drawing of 2-8-2 Standard-Gauge Locomotive	VII - 26

Confidential

LIST OF ILLUSTRATIONS

xv

No.	TITLE	PAGES	No.	TITLE	PAGES
VII - 22	2-8-2 Standard-Gauge Express Locomotive	VII - 26	VII - 34	Sofiya/Serrai Road, Route 16, near Sofiya	VII - 57
VII - 23	Minor Road near Trnovo	VII - 41	VII - 35	Sofiya/Serrai Road in the Kresna Gorge	VII - 58
VII - 24	Shipka Pass through the Stara-Planina	VII - 42	VII - 36	S.S. Balkan	VII - 62
VII - 25	Khaskovo/Komotini (Greece) Road at Krdzhali	VII - 42	VIII - 1	Burgaz. Floating Crane and Vessel at Main Quay	VIII - 3
VII - 26	Sofiya/Serrai Road above Petritsi	VII - 43	VIII - 2	Varna Harbor. Lake Devna and Canal in Back- ground. About 1931	VIII - 6
VII - 27	Minor Road near Madara	VII - 45	VIII - 3	Varna. Landing pier at bathing beach north of harbor	VIII - 6
VII - 28	Bridge in Iskr Gorge	VII - 47	VIII - 4	Varna. View of inner harbor, looking west- southwest, outer harbor at left	VIII - 8
VII - 29	Truck Caravan in Southern Bulgaria	VII - 48	VIII - 5	Varna. View of harbor, looking south- southwest, North Quay in foreground	VIII - 9
VII - 30	Bridge over Maritsa River at Plovdiv	VII - 49	XIII - 1	Varna Harbor	XIII - 1
VII - 31	Asenova. A Suburb of Trnovo	VII - 51			
VII - 32	Varna/Burgaz Road near Barakli	VII - 53			
VII - 33	Pontoon Bridge over Danube, at Ruse	VII - 54			

List of Tables

No.	TITLE	PAGES	No.	TITLE	PAGES
III - 1	Relationship between Wind Force and Wave Height in the Western Black Sea, and Approximate Wave Characteristics	III - 5	VI - 5	Bulgarian Commodity Prices	VI - 3
III - 2	Percentage Frequencies of Wind Forces and Estimated Average Wave Heights in Feet from NE, E, and SE	III - 5	VI - 6	Sofiya, Turnover at Clearing House, 1939	VI - 4
III - 3	Characteristics of Types of Sediment along Coast	III - 12	VI - 7	Iron Mines	VI - 5
IV - 1	Sofiya and Varna, Days with Wet Soil, 5- to 14-Year Period	IV - 10	VI - 8	Chromite Mines	VI - 5
IV - 2	Number of Days with Gales (11-Year Record)	IV - 12	VI - 9	Manganese Mines	VI - 5
IV - 3	Chemical Warfare Operations, by Seasons	IV - 13	VI - 10	Copper Mines	VI - 6
IV - 4	Mean Pressure	IV - 27	VI - 11	Lead and Zinc Mines	VI - 6
IV - 5	Mean Temperatures and Range of Temperatures	IV - 27	VI - 12	Commercial Oil Storage Facilities	VI - 7
IV - 6	Mean Maximum and Highest Temperatures	IV - 27	VI - 13	Military Oil Storage Facilities	VI - 8
IV - 7	Mean Minimum and Lowest Temperatures	IV - 28	VI - 14	Installed Generating Capacity by Region, 1939	VI - 9
IV - 8	Number of Days with Frost all Day and with Frost	IV - 28	VI - 15	Installed Generating Capacity by Type of Plant	VI - 9
IV - 9	Mean Annual and Maximum Rainfall	IV - 29	VI - 16	Electric Power Production	VI - 9
IV - 10	Number of Days with Precipitation	IV - 30	VI - 17	Power Production by Type of Plant	VI - 9
IV - 11	Greatest and Least Precipitation	IV - 30	VI - 18	Diesel Generating Plants	VI - 10
IV - 12	Relative Humidity (Per Cent)	IV - 31	VI - 19	Steam Generating Plants	VI - 10
IV - 13	Number and Maximum Number of Days with Snowfall	IV - 31	VI - 20	Hydroelectric Generating Plants of over 200 H.P. Installed Capacity	VI - 11
IV - 14	Number and Maximum Number of Days with Snow Cover	IV - 32	VI - 21	Hydroelectric Plants	VI - 13
IV - 15	Number of Days with Thunderstorms	IV - 32	VI - 22	Bulgarian Cities, Electric Current Characteristics	VI - 15
IV - 16	Number of Days with Hail	IV - 32	VI - 23	Lead Production	VI - 15
IV - 17	Selected Stations, Wind Data	IV - 33	VI - 24	Important Metal Shops	VI - 15
IV - 18	Cloudiness (Tenths)	IV - 34	VI - 25	Production of Military Equipment	VI - 16
IV - 19	Number of Clear, Partly Cloudy, and Cloudy Days	IV - 35	VI - 26	Pre-War and 1942 Production and Trade in Foodstuffs (in Metric Tons)	VI - 18
IV - 20	Selected Stations, Number of Observations with Ceilings of 1,000 Feet or Less	IV - 35	VI - 27	Harvest Period of Crops	VI - 20
IV - 21	Number of Days with Fog	IV - 36	VI - 28	Livestock Numbers (Pre-War and 1942)	VI - 22
IV - 22	Selected Stations, Number of Observations with Visibilities of $2\frac{1}{2}$ Miles or Less	IV - 36	VI - 29	Daily Consumption of Various Foodstuffs by Average Consumer (Pre-War and 1942)	VI - 23
IV - 23	Alphabetical List of Stations with Types of Observations Taken	IV - 37	VI - 30	Nutritive Value of Average Diet	VI - 23
V - 1	Sofiya, Largest Hotels, 1934	V - 5	VI - 31	Nutritive Value of Urban and Rural Diets	VI - 23
V - 2	Sofiya, Schools, Possible Billeting Places	V - 5	VI - 32	Agricultural Machinery	VI - 23
V - 3	Sofiya, Other Possible Billeting Places	V - 5	VI - 33	Bulgarian Fishing Industry	VI - 24
V - 4	Sofiya, Principal Buildings	V - 6	VI - 34	Type of Water Supply, by Percentage of Population Served, 1930	VI - 26
V - 5	Sofiya, Repair and Service Facilities	V - 6	VI - 35	Water Conduits Constructed by Regional Water Adduction Services	VI - 27
V - 6	Sofiya, Contagious Diseases, 1938-39	V - 7	VI - 36	Water Conditions in Sofiya District	VI - 30
V - 7	Sofiya, Number of Hospital Beds Available	V - 7	VII - 1	Radio Stations	VII - 2
V - 8	Plovdiv, Hotels	V - 10	VII - 2	International Telegraphic Circuits	VII - 4
V - 9	Plovdiv, Schools, Possible Billeting Places	V - 10	VII - 3	Extent of Telephone Network	VII - 5
V - 10	Plovdiv, Other Possible Billeting Places	V - 10	VII - 4	Telephone Lines in Automatic Exchanges	VII - 6
V - 11	Varna, Hotels and Boarding Houses	V - 13	VII - 5	Postal Routes, 1939	VII - 6
V - 12	Varna, Schools	V - 13	VII - 6	Functional Division of Railroad Employees, 1938	VII - 7
V - 13	Varna, Other Possible Billeting Places	V - 14	VII - 7	Length of Standard- and Narrow-Gauge Railroad Lines	VII - 8
V - 14	Varna, Principal Buildings	V - 14	VII - 8	Length of Track Compared to Length of Line	VII - 8
V - 15	Varna, Repair and Service Facilities	V - 14	VII - 9	Measurements of Roadbed	VII - 8
V - 16	Ruse, Schools	V - 18	VII - 10	Dimensions of First- and Second-Class Rails	VII - 9
V - 17	Ruse, Principal Buildings	V - 18	VII - 11	Age of Rails	VII - 9
V - 18	Ruse, Repair and Service Facilities	V - 18	VII - 12	Passenger Traffic	VII - 18
V - 19	Burgaz, Hotels	V - 19	VII - 13	Volume of Freight Traffic	VII - 18
V - 20	Burgaz, Principal Buildings	V - 19	VII - 14	Commodities Carried and Percentage of Traffic	VII - 18
V - 21	Burgaz, Repair and Service Facilities	V - 19	VII - 15	Monthly Ratios in Percentage of Total Annual Traffic	VII - 18
VI - 1	Foreign Trade	VI - 2	VII - 16	Principal Lines (Standard Gauge) and Their Characteristics	VII - 27
VI - 2	Denominations of Coinage	VI - 3	VII - 17	Other Lines (Standard Gauge) and Their Characteristics	VII - 28
VI - 3	Circulation of Subsidiary Coins	VI - 3	VII - 18	Narrow-Gauge Lines and Their Characteristics	VII - 28
VI - 4	Bank Notes in Circulation	VI - 3	VII - 19	International Connections with Bulgaria and Their Capacities	VII - 29



LIST OF TABLES

xvii

No.	TITLE	PAGES	No.	TITLE	PAGES
VII - 20	Railroad Density	VII - 29	VII - 48	Merchant Fleet	VII - 61
VII - 21	Private Industrial and Other Sidings on Bulgarian Railroads	VII - 29	VIII - 1	Burgaz; Piers, Wharves and Quays	VIII - 4
VII - 22	Water Supply for Locomotives, 1935	VII - 30	VIII - 2	Burgaz; Principal Exports, 1938	VIII - 4
VII - 23	Grades on Standard- and Narrow-Gauge Lines of National Railroads	VII - 31	VIII - 3	Varna; Piers, Wharves and Quays	VIII - 9
VII - 24	Curves on Standard- and Narrow-Gauge Lines of National Railroads	VII - 32	VIII - 4	Varna; Principal Exports, 1937	VIII - 11
VII - 25	Standard- and Narrow-Gauge Locomotives and Railcars	VII - 32	VIII - 5	Varna; Floating Drydock Dimensions	VIII - 12
VII - 26	Types of Standard- and Narrow-Gauge Locomotives	VII - 32	IX - 1	1934 Population Densities by Administration Regions	IX - 3
VII - 27	Types of Narrow-Gauge Tank Locomotives, 1937	VII - 32	IX - 2	Distribution of Bulgarian Labor by Industry in 1934	IX - 7
VII - 28	Standard- and Narrow-Gauge Passenger and Baggage Cars, 1938	VII - 33	X - 1	Bulgarian High Command	X - 3
VII - 29	Types of Standard-Gauge Passenger Cars, 1937	VII - 34	X - 2	Table of Organization (Corps)	X - 5
VII - 30	Types of Standard-Gauge Mail and Baggage Cars, 1937	VII - 34	X - 3	Table of Organization (Division Headquarters)	X - 6
VII - 31	Standard- and Narrow-Gauge Freight Cars, 1938	VII - 34	X - 4	Table of Organization (Division Reconnaissance Battalion)	X - 6
VII - 32	Types of Standard-Gauge Freight Cars, 1937	VII - 34	X - 5	Table of Organization (Division Field Artillery Regiment)	X - 6
VII - 33	Repair Shops	VII - 35	X - 6	Table of Organization (Infantry Regiment, Weapons Company)	X - 6
VII - 34	Roundhouses	VII - 35	X - 7	Table of Organization (Infantry Regiment, Anti-tank Company)	X - 6
VII - 35	Switching Yards	VII - 36	X - 8	Table of Organization (Armored Brigade)	X - 6
VII - 36	Capacities of Railroad Lines under Normal Operating Conditions	VII - 36	XI - 1	Bulgarian Air Force, First Line Strength, 20 May 1943	XI - 1
VII - 37	Bridges	VII - 37	XI - 2	Bulgarian Air Force, Approximate Personnel Strength	XI - 1
VII - 38	Inventory and Descriptions of Principal Tunnels	VII - 39	XI - 3	Organization of the Bulgarian Directorate of Aviation	XI - 1
VII - 39	Passes Connecting Danubian Tablelands	VII - 41	XI - 4	Organization of the Bulgarian Air Force Group	XI - 2
VII - 40	Surface and Length of Roads	VII - 46	XI - 5	Peacetime Personnel of Bulgarian Air Force Squadron	XI - 2
VII - 41	Classes and Widths of Roads	VII - 46	XI - 6	Approximate Pay of Bulgarian Army Officers	XI - 2
VII - 42	Road Requirements	VII - 46	XI - 7	Location and Facilities of Bulgarian Air Fields	XI - 3
VII - 43	Number of Vehicles	VII - 49	XII - 1	Strength of Fleet (August, 1943)	XII - 1
VII - 44	Roads and Bridges, 1939	VII - 59	XII - 2	State of Fleet Units	XII - 1
VII - 45	Roads under Construction	VII - 59	XII - 3	Personnel of "Bulgarian Marine and River Service"	XII - 2
VII - 46	Hauling Facilities on Danube, 1937	VII - 60	XII - 4	Ruse, Distribution of Oil Tanks	XII - 4
VII - 47	Danube River Ports	VII - 61	XIII - 1	Varna (Meteorological Table)	XIII - 4



Index

- ARMY (except Air), Chap. X.*
 ARMY AIR, Chap. XI.*
 ASENVOGRAD, p. V - 28.
 BEACHES, p. III - 51 to III - 84.
 See Landing Places.
 BRIEF, Chap. I.
 BURGAS, pp. V - 17 to V - 19; Fig. V - 5; Tables V - 19 to V - 21.
 CHIRPAN, p. V - 29.
 CITIES AND TOWNS, Chap. V.
 Gen. description, pp. 1-2, 1-3.
 Degree of urbanization, p. V - 1.
 Functions, p. V - 1.
 Physical characteristics, p. V - 1.
 Strategic and political importance, p. V - 1.
 CLIMATE, Chap. IV.
 Effect on aviation, p. IV - 11; Fig. IV - 33; Tables IV - 2, IV - 9, IV - 10, IV - 13, IV - 17, IV - 20, IV - 22.
 Effect on chemical warfare, p. IV - 12; Tables IV - 12, IV - 17 to IV - 19.
 Effect on landing operations, pp. IV - 8 to IV - 10; Figs. IV - 1, IV - 10, IV - 18, IV - 25; Tables IV - 1, IV - 4, IV - 17.
 Effect on movement over the country, pp. IV - 10 to IV - 11; Figs. IV - 2, IV - 6, IV - 7, IV - 11, IV - 19 to IV - 21, IV - 26, IV - 33; Tables IV - 1, IV - 4 to IV - 8, IV - 11 to IV - 15.
 Forecasting, p. IV - 15.
 General description, pp. I - 2, IV - 1 to IV - 7; Figs. IV - 1 to IV - 19, IV - 23 to IV - 32; Tables IV - 8, IV - 9, IV - 13.
 Sound ranging, p. IV - 15; Tables IV - 4, IV - 5, IV - 12.
 Type of weather, p. IV - 15.
 COASTAL HYDROGRAPHY, Topic No. 32.
 Coastal currents, p. III - 15.
 General description, pp. I - 1, III - 1.
 Offshore zone, p. III - 15.
 Underwater defenses, p. III - 15.
 COASTS, Topic No. 33.
 Cape Aspro to Kamchiya River, p. III - 40; Illust. III - 45.
 Cape Emine, pp. III - 36, III - 37; Illusts. III - 30 to III - 38.
 Cape Emine to Cape Aspro, p. III - 38; Illusts. III - 39 to III - 44.
 Cape Kuri to Galachiya Point, p. III - 16; Illusts. III - 1, III - 2.
 Cape Sv. Georgii-Balcic, p. III - 52; Illusts. III - 50, III - 51, III - 71.
 Galachiya Point to Tsarevo, p. III - 18; Illusts. III - 3, III - 4.
 General description, pp. 1-2, III - 1, III - 2.
 Gulf of Burgaz and approaches
 Burgaz to Pomoriye, p. III - 30; Illusts. III - 22, III - 23.
 Cape Zeitin to Sozopol, p. III - 22; Illusts. III - 8 to III - 10.
 Kavos Svitera to Nos Sveta Anastasiya, p. III - 26; Illusts. III - 15 to III - 18.
 Nos Sveta Anastasiya to Burgaz, p. III - 28; Illusts. III - 19 to III - 21.
 Pomoriye to Ravda Burnu, p. III - 32; Illusts. III - 24 to III - 26.
 Ravda Burnu to Cape Emine, p. III - 34; Illusts. III - 27 to III - 29.
 Sozopol Bay, p. III - 24; Illusts. III - 11 to III - 14.
 Tsarevo to Cape Zeitin, p. III - 20; Illusts. III - 5 to III - 7.
 Kamchiya River to Cape Galata, p. III - 41; Illusts. III - 46 to III - 49.
 Varna Bay, p. III - 43; Illusts. III - 50, III - 61, III - 62.
 Cape Galata to Varna, p. III - 47; Illusts. III - 49 to III - 51.
 Varna to Cape Sv. Georgii, p. III - 49; Illusts. III - 63 to III - 70.
 COMMERCE, Topic No. 61.
 Exports, regional and national, p. VI - 1; Table VI - 1.
 General description, p. VI - 1.
 Imports, regional and national, p. VI - 1; Table VI - 1.
 COMMUNICATIONS, Chap. VII.
 General description, p. I - 3.
 CRITICAL AREAS, Topic No. 25.
 Burgaz, p. II - 13.
 General, p. II - 12; Fig. II - 5.
 Others, p. II - 13.
 Plovdiv/Kazanlk/Stara Zagora triangle, p. II - 12.
 Routes
 General, p. II - 13.
 Specific, p. II - 13; Figs. II - 5 to II - 21.
 Ruse, p. II - 13.
 Sofiya Basin, p. II - 12.
 Varna, p. II - 13.
 DOBROGEA, p. IX - 1.
 DRAINAGE
 See Rivers and Drainage.
 DUPNITSA, p. V - 28.
 ELECTRIC POWER, Topic No. 64.
 Consumer distribution, pp. VI - 13, VI - 15; Table VI - 22.
 Consumption, pp. VI - 9, VI - 10.
 Extent of electrification, p. VI - 9; Fig. VI - 2; Tables VI - 14, VI - 15.
 General Description, p. VI - 1.
 Plants
 Diesel, p. VI - 10; Table VI - 18.
 Hydroelectric, pp. VI - 11 to VI - 13; Tables VI - 20, VI - 21; Illusts. VI - 3 to VI - 9.
 Steam, pp. VI - 10, VI - 11; Illust. VI - 2; Table VI - 19.
 Self-sufficiency in power supply, p. VI - 9; Tables VI - 16, VI - 17.
 Transmission network, p. VI - 9.
 FINANCE, Topic No. 62.
 Banking system, p. VI - 4; Table VI - 6.
 Currency, p. VI - 3; Tables VI - 2 to VI - 4.
 Currency value in gold, p. VI - 3.
 General description, p. VI - 1.
 Purchasing power, p. VI - 3; Table VI - 5.
 FOOD RESOURCES, Topic No. 66.
 Agriculture, pp. VI - 20 to VI - 24; Figs. VI - 3, VI - 4; Illusts. VI - 11 to VI - 14; Tables VI - 26 to VI - 32.
 Fish, p. VI - 24; Fig. VI - 3; Table VI - 33.
 General description, pp. VI - 1, VI - 2.
 FUEL, pp. VI - 6 to VI - 8; Fig. VI - 1; Tables VI - 12, VI - 13.
 GABROVO, p. V - 27.
 GABROVSKI, MR.
 Minister of Interior, p. IX - 2.
 GEOGRAPHY—See Military Geography.
 GLOSSARY
 See Appendix I.
 GORNA DZHUMAYA, p. V - 29.
 GORNA OREKHOVITSA, p. V - 29.
 GOVERNMENT, Chap. IX.
 Cabinet (Ministerial Council), pp. IX - 2, IX - 8; Fig. IX - 2.
 Central government, p. IX - 8; Fig. IX - 1.
 Efficiency, p. IX - 8.
 General description, p. I - 4.
 King, pp. IX - 2, IX - 8.
 Local government, p. IX - 8; Fig. IX - 1.
 National Assembly, pp. IX - 2, IX - 8; Fig. IX - 2.
 HEALTH, Topic No. 93 and App. II.
 Diseases, p. IX - 5.
 Food and food handlers, p. IX - 5.
 Precautionary recommendations, pp. IX - 5, IX - 6; Appendix II.
 Public health, p. IX - 5.
 Water supply, p. IX - 5.

*Chapters X through XIII are included in the Index by title only.

Confidential

INDEX

xix

INDUSTRIAL RAW MATERIALS AND PRIMARY PROCESSING, Topic No. 63.
General description, p. VI - 1.

INLAND WATERWAY TRANSPORT

Administration, p. VII - 61.

Danube River, pp. VII - 60, VII - 61; Illusts. V - 11; VII - 33;
Tables VII - 46, VII - 47.

General description, p. VII - 1.

KAZANLK, p. V - 24.

KHASKOVO, pp. V - 27, V - 28.

KYUSTENDIL, pp. V - 23, V - 24.

LAKES, Topic No. 22.

See Rivers and Drainage.

LANDING PLACES, Topic No. 34.

Beaches

Akhtopol, pp. III - 51, III - 54; Figs. III - 20, III - 23.

Akroteri Bay, p. III - 57; Fig. III - 25.

Atiya Bay, p. III - 60; Fig. III - 26.

Balcic, pp. III - 78, III - 79; Figs. III - 35, III - 36; Illusts.
III - 86 to III - 90.

Bela, pp. III - 67, III - 68; Fig. III - 31.

Bel Monastir Post, pp. III - 77, III - 78; Fig. III - 35.

Between Nos Ativolos and Nos Atiya, pp. III - 59, III - 60;
Fig. III - 26.

Between Nos Sveta Agalina and Nos Sveti Stefan, p. III - 57;
Fig. III - 25.

Bol-Ata Dere, p. III - 8; Fig. III - 38; Illust. III - 96.

Burgaz, pp. III - 62, III - 63; Figs. III - 26 to III - 28; Illusts.
III - 69, III - 70.

Cape Krotiriya, p. III - 64; Fig. III - 28.

Carapcea, p. III - 84; Fig. III - 39.

Cavarna, p. III - 81; Figs. III - 37, III - 38; Illusts. III - 91 to
III - 95.

Chingani Bay-A, p. III - 60; Fig. III - 26.

Chingani Bay-B, pp. III - 60, III - 61; Fig. III - 26.

Chingani Bay-C, pp. III - 61, III - 62; Fig. III - 26.

Chingani Bay-D, p. III - 62; Fig. III - 26.

Dyavolski Bay, pp. III - 55, III - 56; Fig. III - 24.

Evksinograd, pp. III - 73, III - 76; Figs. III - 9, III - 21, III - 33;
Illusts. III - 83, III - 84.

Hadzhidere, pp. III - 66, III - 67; Fig. III - 30.

Lakanathes Bay, pp. III - 63, III - 64; Fig. III - 28.

Lake Satalmas, p. III - 83; Fig. III - 39.

Nesebr-A, p. III - 65; Figs. III - 29, III - 30.

Nesebr-B, pp. III - 65, III - 66; Figs. III - 29, III - 30; Illusts.
III - 71, III - 72.

Nesebr-C, p. III - 66; Figs. III - 29, III - 30.

Nos Atiya, pp. III - 59, III - 60; Fig. III - 26.

Nos At. Liman, p. III - 55; Fig. III - 24.

Nos Urdoviza, p. III - 55; Fig. III - 24.

Nos Yemberler-A, p. III - 54; Fig. III - 24.

Nos Yemberler-B, pp. III - 54, III - 55; Fig. III - 24.

Nos Yemberler-C, p. III - 55; Fig. III - 24.

Obzor, p. III - 67; Fig. III - 31.

Pomoriye, pp. III - 64, III - 65; Figs. III - 28, III - 29.

Poros Bay, p. III - 62; Figs. III - 26, III - 27.

P. Yerekli, p. III - 67; Fig. III - 30.

Răcari-A, p. III - 84; Fig. III - 39.

Răcari-B, pp. III - 84, III - 85; Fig. III - 39.

Ravda, p. III - 65; Fig. III - 29.

Reka Golema-Kamchiya, pp. III - 68, III - 69; Figs. III - 31,
III - 32.

Sozopol, p. III - 58; Fig. III - 25; Illust. III - 68.

Sozopol Bay, pp. III - 58, III - 59; Fig. III - 25.

Stomoplo Bay, p. III - 56; Fig. III - 24.

Sveti Konstantin, pp. III - 76, III - 77; Fig. III - 33; Illust. III - 85.

Sveti Nikola, p. III - 59; Figs. III - 25, III - 26.

Syurtyu-K'oy, pp. III - 81, III - 83; Figs. III - 20, III - 38; Illusts.
III - 97, III - 98.

Tsarevo, p. III - 54; Fig. III - 24.

Varna-A, pp. III - 69 to III - 70; Fig. III - 33; Illusts. III - 54,
III - 55, III - 73.

Varna-B, pp. III - 70, III - 72; Figs. III - 33 to III - 34; Illusts.
III - 56, III - 74 to III - 82.

Varna-C, pp. III - 72, III - 73; Fig. III - 33.

Verkh Burnis, p. III - 68; Fig. III - 31.

Yekrene, p. III - 78; Fig. III - 35.

Yezero Alepu, pp. III - 56, III - 57; Fig. III - 25.

Yezero Arkutino, p. III - 56; Fig. III - 25.

General description, pp. I - 2, III - 1.

Introduction, p. III - 51; Figs. III - 19, III - 21, III - 22; Plan III - 1.

LANGUAGES, Topic No. 92.

Knowledge of English, p. IX - 4.

Major, minor and official, pp. IX - 3, IX - 4.

LOM, p. V - 25.

MANUFACTURING, Topic No. 65.

Building materials, p. VI - 20.

Chemical and allied industries, pp. VI - 16, VI - 17.

General description, p. VI - 1.

Metals and machines, p. VI - 15; Fig. VI - 1; Illust. VI - 10;
Tables VI - 23 to VI - 25.

Textiles, p. VI - 17.

MERCHANT SHIPPING, Topic No. 79.

Available tonnage, p. VII - 61; Table VII - 48.

Immobilized, pp. VII - 61, VII - 62; Illust. VII - 36.

METEOROLOGY, Chap. IV.

See Climate.

METEOROLOGICAL FACILITIES, Topic No. 42.

Equipment and personnel, p. IV - 17.

Meteorological service, p. IV - 17; Table IV - 22.

MILITARY GEOGRAPHY, Chap. II.

General description, p. I - 1; Fig. I - 1.

See Relief.

MINERALS, pp. VI - 4 to VI - 6; Illust. VI - 1; Tables VI - 7 to VI - 11.

NAVY (except Air), Chap. XII.*

NAVY Air, Chap. XIII.*

OCEANOGRAPHY, Topic No. 31.

Acoustic conditions, p. III - 12; Fig. III - 17.

Biological factors, pp. III - 13, III - 15; Figs. III - 14, XIII - 1.

Currents

Non-tidal, pp. III - 2, III - 3; Figs. III - 2, III - 14.

Tidal, pp. III - 1, III - 2.

Density, pp. III - 10, III - 11; Figs. III - 12, III - 13.

General description, pp. I - 1, III - 1.

Hydrographic factors, p. III - 7.

Salinity

Surface and subsurface, p. III - 10; Figs. III - 9 to III - 11.

Sea and swell, pp. III - 3, III - 5, III - 6; Figs. III - 3 to III - 6;
Tables III - 1, III - 2.

Sediments, pp. III - 11, III - 12; Figs. III - 14 to III - 16.

Temperatures

Surface and subsurface, pp. III - 7, III - 8, III - 10; Figs. III - 7,
III - 8.

Tides, pp. III - 1, III - 2; Fig. III - 1.

Water

Color and transparency, pp. III - 12, III - 13.

PANAGYURISHTA, p. V - 29.

PAZARDZHIK, p. V - 28.

PEOPLE, Chap. IX.

Distribution of population, p. IX - 3.

Ethnic groups, p. IX - 3.

General description, p. I - 4.

Temperament and attitudes, p. IX - 4.

*Chapters X through XIII are included in the Index by title only.

xx

INDEX

- PERNIK, pp. V - 19, V - 20; Fig. V - 6; Illust. V - 12.
- PETRICH, p. V - 29.
- PLEVEN, p. V - 21.
- PLOVDIV, pp. V - 7 to V - 11; Fig. V - 2; Illusts. V - 5 to V - 7; Tables V - 8 to V - 10.
- POLITICAL BACKGROUND, Topic No. 97.
- Alien ties
- German control, pp. IX - 2, IX - 4.
 - Pan Slavism, pp. IX - 2, IX - 4.
 - Russia, pp. IX - 1, IX - 2, IX - 4.
 - Foreign policy, pp. IX - 10, IX - 11.
 - General political organizations, p. IX - 9.
 - Historical, p. IX - 1.
 - Parties, pp. IX - 9, IX - 10.
- POPULATION
- See People.
- PORT FACILITIES, Chap. VIII.
- Distinctive regional characteristics, p. VIII - 1.
- General description, p. I - 4.
- PORTS (Major), Topic No. 81.
- Burgaz
- Harbor, pp. VIII - 1 to VIII - 3; Figs. VIII - 1, VIII - 2.
 - Landing facilities, pp. VIII - 3 to VIII - 5; Fig. VIII - 3; Illusts. V - 9, VIII - 1; Tables VIII - 1, VIII - 2; Plan VII - 2.
 - Recent changes, p. VIII - 5.
 - Repair facilities, p. VIII - 5.
 - Supplies, availability of, p. VIII - 5; Fig. VIII - 3.
 - Vulnerability, p. VIII - 5.
- Varna
- Harbor, pp. VIII - 1, VIII - 5 to VIII - 8; Figs. VIII - 1, VIII - 4; Illusts. VIII - 2, VIII - 3, VIII - 4.
 - Landing facilities, pp. VIII - 8, VIII - 9, VIII - 11; Fig. VIII - 5; Illusts. VIII - 3, VIII - 5; Tables VIII - 3, VIII - 4.
 - Recent changes, p. VIII - 12; Illust. VIII - 12.
 - Repair facilities, p. VIII - 12; Table VIII - 5.
 - Supplies, pp. VIII - 11, VIII - 12; Fig. VIII - 5.
 - Vulnerability, p. VIII - 12; Illust. VIII - 2.
- PORTS (Minor), Topic No. 82.
- Akhtopol
- Capacity, p. VIII - 13.
 - Harbor, pp. VIII - 1, VIII - 13.
 - Landing facilities, p. VIII - 13.
 - Local problems, p. VIII - 13.
 - Supplies and repairs, p. VIII - 13.
 - Vulnerability, p. VIII - 13.
- Nesebr
- Capacity, p. VIII - 13.
 - Harbor, pp. VIII - 1, VIII - 13; Illust. VIII - 71.
 - Landing facilities, p. VIII - 13.
 - Local problems, p. VIII - 13.
 - Supplies and repairs, p. VIII - 13.
 - Vulnerability, p. VIII - 13.
- Tsarevo
- Capacity, p. VIII - 12.
 - Harbor, pp. VIII - 1, VIII - 12.
 - Landing facilities, p. VIII - 12.
 - Local problems, p. VIII - 13.
 - Supplies and repairs, p. VIII - 12.
 - Vulnerability, p. VIII - 13.
- POSTAL SERVICE
- Extent of development, p. VII - 6; Table VII - 5.
 - Reliability of system, p. VII - 6.
 - Type of service, p. VII - 6.
- PUBLIC ORDER, Topic No. 96.
- Officials with policing powers, p. IX - 9.
 - Penal institutions, p. IX - 9.
 - Pertinent legal peculiarities, p. IX - 9.
 - Police, p. IX - 8.
- QUARRIES, pp. VI - 8, VI - 9; Fig. VI - 7.
- RADIO AND SPECIAL WIRELESS SERVICES
- Communication with aircraft, p. VII - 2.
 - Communication with ships, p. VII - 2.
 - Point-to-point radio telegraphy, p. VII - 2.
 - Radio system, pp. VII - 1, VII - 2; Table VII - 1.
- RAILROADS
- Administration, p. VII - 7; Table VII - 6.
 - Capacity, p. VII - 20; Figs. VII - 2, VII - 4; Tables VII - 19, VII - 36.
 - Equipment, pp. VII - 16, VII - 17; Illusts. VII - 15 to VII - 22; Tables VII - 25 to VII - 32.
 - Lines, Tables VII - 16 to VII - 18.
 - Projected, pp. VII - 21, VII - 40.
 - Under construction, p. VII - 21; Plan VII - 1.
 - Pattern of system, pp. VII - 6, VII - 7; Fig. VII - 2; Illust. VII - 14.
 - Shops, terminals, yards, p. VII - 18; Fig. VII - 3; Tables VII - 33 to VII - 35.
 - Track and right-of-way, pp. VII - 7 to VII - 16; Fig. VII - 2; Illusts. VII - 1 to VII - 13; Tables VII - 7 to VII - 11, VII - 16 to VII - 18, VII - 21, VII - 22, VII - 24, VII - 37, VII - 38; Plan VII - 1.
 - Traffic, pp. VII - 18, VII - 20; Tables VII - 12 to VII - 15.
 - Vulnerable points, p. VII - 21; Figs. VII - 2, VII - 5; Tables VII - 33 to VII - 35; VII - 37, VII - 38; Plan VII - 1.
- REGIONS, Topic No. 20.
- Summary, p. II - 1.
- RELIEF, Topic No. 21.
- Balkan Mountains. (Stara-Planina), pp. II - 7, II - 8; Illusts. II - 18 to II - 21, II - 24.
- Central Depression, pp. II - 5 to II - 7; Illusts. II - 13 to II - 17, VI - 10.
- Danubian Tablelands, p. II - 8; Illusts. II - 22 to II - 26.
- General, p. II - 2; Fig. II - 1.
- Southern Highlands, pp. II - 2 to II - 5; Illusts. II - 1 to II - 12, VII - 35.
- RELIGION, Topic No. 92.
- Eastern Orthodox State Church, pp. IX - 1, IX - 2, IX - 4.
 - Moslems, p. IX - 4.
- RESOURCES, Chap. VI.
- General description, p. I - 3.
- RIVERS AND DRAINAGE
- Balkan Mountains, p. II - 10.
 - Central Depression, pp. II - 9, II - 10; Illust. II - 17.
 - Danubian Tablelands, p. II - 10; Illusts. II - 18 to II - 20, V - 14, VII - 10 to VII - 12.
 - General, p. II - 9; Fig. II - 3.
 - Southern Highlands, p. II - 19.
- ROADS
- Administration, p. VII - 46; Illust. VII - 27.
 - Construction and quality, pp. VII - 46 to VII - 47; Tables VII - 40 to VII - 42, VII - 44, VII - 45; Illust. VII - 28.
 - General characteristics, p. VII - 40.
 - General description, p. VII - 1; Plan VII - 2.
 - Main Roads, description of
 - Dupnitsa/Kriva Palanka, Yugoslavia, p. VII - 56.
 - Gorna Dzhumaya/Corevo-Selo, Yugoslavia, p. VII - 56.
 - Khaskovo/Komotini, Greece, p. VII - 59.
 - Levonovo (Deltchevo)/Strumica, Yugoslavia, p. VII - 56.
 - Plovdiv/Edirne, Turkey, p. VII - 50.
 - Plovdiv/Xanthi, Greece, p. VII - 59.
 - Ruse/Trnovo, p. VII - 52; Illust. VII - 33.
 - Sofiya/Burgaz, pp. VII - 51, VII - 52.
 - Sofiya/Caribrod, Yugoslavia, p. VII - 55.
 - Sofiya/Drâma, Greece, pp. VII - 57, VII - 59.
 - Sofiya/Lom, p. VII - 50.

INDEX

xxi

- Sofiya/Plovdiv, pp. VII - 49, VII - 50; Illust. VII - 30.
 Sofiya/Sérrai, Greece, pp. VII - 56, VII - 57; Illusts. VII - 34, VII - 35.
 Sofiya/Varna, pp. VII - 50, VII - 51; Illust. VII - 31.
 Sofiya/Vratsa, p. VII - 50.
 Trnovo/Kazanlk, p. VII - 55; Illust. VII - 24.
 Varna/Burgaz, p. VII - 52; Illust. VII - 32.
 Vidin/Negotin Yugoslavia, p. VII - 55.
 Vidin/Zaječar, Yugoslavia, p. VII - 55.
 Maintenance, p. VII - 48.
 Natural conditions along roads, pp. VII - 40 to VII - 46; Plan VII - 2; Illusts. VII - 23 to VII - 26; Table VII - 39.
 Traffic density and use of roads, p. VII - 48; Illust. VII - 29.
 Vehicles, pp. VII - 48, VII - 49; Table VII - 43.
 ROZGRAD, p. V - 28.
 RUSE, pp. V - 15 to V - 17; Fig. V - 4; Illusts. V - 10, V - 11; Tables V - 16 to V - 18.
 SAMOKOV, p. V - 29.
 SANITATION, Topic No. 93.
 See Health.
 SECURITY, Topic No. 96.
 See Public Order.
 SEWAGE, p. IX - 5.
 SHUMEN, p. V - 23.
 SEASONAL CHANGE, Topic No. 24.
 Balkan Mountains, p. II - 12.
 Central Depression, p. II - 12.
 Danubian Tablelands, p. II - 12.
 General, p. II - 11.
 Southern Highlands, pp. II - 11, II - 12.
 SLIVEN, pp. V - 21, V - 22.
 SOCIAL STRUCTURE AND BACKGROUND, Topic No. 94.
 Contemporary aspects, p. IX - 2.
 Education, p. IX - 7.
 Labor, pp. IX - 7, IX - 8.
 Social groups, p. IX - 6.
 Stability, p. IX - 7.
 SOFIYA, pp. V - 1 to V - 7, VII - 1; Fig. V - 1; Illusts. V - 1 to V - 4; Tables V - 1 to V - 7.
 STARA-ZAGORA, pp. V - 22, V - 23.
 STREAMS, Topic No. 22.
 See Rivers and Drainage.
 SUBMARINE CABLE, p. VIII - 6.
 SVISHTOV, p. V - 29.
 SWAMPS, Topic No. 22.
 See Rivers and Drainage.
 TELEGRAPH
 Ownership and operation, pp. VII - 4, VII - 5.
 Pattern of network, p. VII - 4; Fig. VII - 1; Table VII - 2.
 Route equipment, p. VII - 5.
 Vulnerable features, p. VII - 5.
 TELEPHONES
 Centrals, pp. VII - 5, VII - 6.
 Pattern of network, p. VII - 5; Fig. VII - 1; Tables VII - 3, VII - 4.
 Route equipment, p. VII - 6.
 Vulnerable points, p. VII - 6.
 TRADE, Chap. VI.
 General description, p. I - 3.
 TRANSPORTATION, Chap. VII.
 General description, pp. I - 3, I - 4; VII - 1.
 TRNOVO, pp. V - 26, V - 27; Illusts. V - 13, V - 14.
 VARNA, pp. V - 11 to V - 14; Fig. V - 3; Illusts. V - 8, V - 9; Tables V - 11 to V - 15.
 VEGETATION, Topic No. 23.
 Balkan Mountains, p. II - 11.
 Central Depression, p. II - 11.
 Danubian Tablelands, p. II - 11.
 General, p. II - 10; Fig. II - 4.
 Southern Highlands, pp. II - 10, II - 11.
 VIDIN, pp. V - 20, V - 21.
 VRATSA, p. V - 28.
 WATER SUPPLY, Topic No. 67.
 City and town, pp. VI - 27 to VI - 29; Figs. VI - 6, VI - 7; Illusts. VI - 16 to VI - 19; Table VI - 36.
 General characteristics, pp. VI - 24, VI - 25; Illust. VI - 14.
 General description, p. VI - 2.
 Government activity, p. VI - 26.
 Quality, p. VI - 26.
 Springs and wells, p. VI - 26; Illust. VI - 15.
 Supply systems by district, pp. VI - 26, VI - 27; Tables VI - 34, VI - 35.
 YAMBOL, p. V - 30.